

Final Environmental Assessment

Robb/Ledford Wildlife Management Area Grazing Lease

March 2010



***Montana Fish,
Wildlife & Parks***

Environmental Assessment MEPA, NEPA, MCA 23-1-110

I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action: *Montana Fish, Wildlife & Parks (FWP) proposes to establish a new grazing lease on the Robb/Ledford Wildlife Management Area (WMA) with the Ledford Creek Gazing Association (Association) for a 3-year term to begin January 2010 through October 2012 which would allow the continuation of a rest-rotation grazing system on the WMA.*

The proposed lease would encompass 17,302 FWP owned acres, 10,796 acres FWP leases from Montana Department of Natural Resources and Conservation (DNRC), 680 acres owned by the U.S. Bureau of Land Management, and 3,600 acres owned by DNRC known as the McGuire section that is leased by the Association and incorporated into the Robb/Ledford Coordinated Grazing System (R/L System) through an exchange of use agreement. Total acres involved in the R/L System are 32,378.

In conjunction with the lease agreement, FWP plans to install a 3.84-mile riparian fence along Robb Creek and establish three small water gap access points in order to protect the existing riparian areas from livestock grazing.

2. Agency authority for the proposed action:

FWP has the authority under Section 87-1-210, M.C.A. to protect, enhance, and regulate the use of Montana's fish and wildlife resources for public benefit now and in the future. Any consideration of continued livestock grazing would have to conform with objectives of maintaining or improving wildlife, wildlife habitat, and public access as outlined in the Robb/Ledford Management Plan (1999). Additionally, the Fish, Wildlife and Parks Commission must approve any grazing leases on Wildlife Management Areas owned by FWP.

3. Anticipated Schedule:

Public Comment Period: Thursday, August 20 – Friday, October 2, 2009

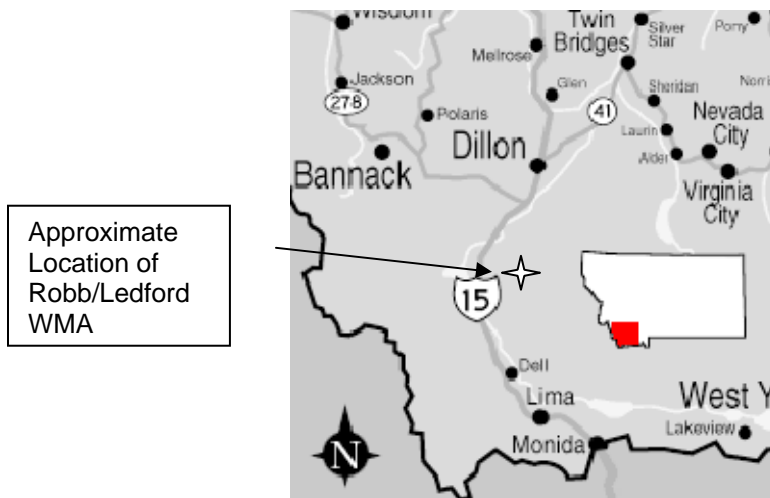
Presented to the FWP Commission for Approval: November 12

Proposed Lease in Effect: January 2009

4. Location:

The WMA is located in Madison and Beaverhead Counties in Southwestern Montana. It is situated on the western slopes of the Snowcrest Mountains approximately 20 miles south of Alder, Montana, along the Robb and Ledford Creek drainages of the Ruby River and a portion of the upper Blacktail Creek drainage. This WMA borders the Beaverhead National Forest (FS), Bureau of Land Management (BLM), Department of Natural Resources and Conservation (DNRC), FWP's Blacktail WMA, and private lands.

The WMA straddles Madison and Beaverhead Counties encompassing parts of T9S, R5W; T9S, R4W; T10S, R6W; T10S, R5W; T10S, R4W; T11S, R6W; and T11S, R5W. See Appendix A for a map of the WMA.



5. Project size:

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0.5</u>		
Industrial	<u>0</u>	(e) Productive:	
(existing shop area)		Irrigated cropland	<u>0</u>
(b) Open Space/		Dry cropland	<u>0</u>
Woodlands/Recreation		Forestry	<u>0</u>
(c) Wetlands/Riparian	<u>~400</u>	Rangeland	<u>31,978</u>
Areas		Other	<u>0</u>

6. Costs and Jurisdictions:

- (a) **Permits:** None
- (b) **Costs to FWP:** Water gap fence \$ 43,271
Maintenance for riparian fence and existing pasture fences
- (c) **Other Overlapping or Additional Jurisdictional Responsibilities:** None

7. Need for Proposed Action:

History of Grazing Leases on the WMA

In 1987, the Rocky Mountain Elk Foundation (RMEF), supported by a \$500,000 donation from Anheuser-Busch Companies Inc., purchased the property from the Ledford Creek Grazing Association.

FWP acquired the Robb/Ledford Wildlife Management Area in 1988 from the RMEF. This was FWP's first acquisition using funds from a new lands program authorized from earmarked license revenue under House Bill 526. This acquisition was also RMEF's first habitat conservation project.

RMEF, FWP, and sportsmen touted the acquisition as an opportunity to provide a “showcase for cooperative management between ranching and wildlife interests.” At the time of acquisition, the Ledford Creek Grazing Association (Association) retained the grazing rights until November 1, 1990. From 1991 through 1999, FWP leased the grazing to the Association under a rest rotation grazing formula with a stocking rate 3,495 Animal Unit Months (AUMs) and during a grazing season June 15 through October 15.

During the 1990s as FWP was preparing their grazing plans, controversy grew between landowners, FWP, and sportsmen. The controversy centered on whether FWP was managing the WMA more as a cattle ranch than a WMA. In a memo dated February 18, 1998, to the FWP Commission, Joel Peterson (former Region 3 Wildlife Manager) summarized the history as follows:

- 1) “WMA purchased 1988 – 9600 AUMs on WMA.”*
- 2) “Grazing reduced in 1991 from 6 to 4 months (June 15 to Oct. 15) and reduced AUMs to 5855 on WMA.”*
- 3) “Following the 1991 season FWP determined the need to further reduce Animal Units to 500 to reach an objective of having approximately 6 acres of primary range for each AUM of grazing. Keep in mind, not all of the WMA acreage would be available for grazing during any particular year. This is because some areas may not be in the system because they are critical winter range. Non-grazeable range would not be included and 1/3 of the grazeable acres would not be used each year under a rest rotation system. The intention to graze the game range under a rest rotation system is outlined in the enclosed EA. As you can see by the enclosed documentation, the Association opposed the proposed 1992 reduction. Subsequently, an agreement was made between the Association and FWP as negotiated by George Swann representing the Association and R-3 Game Manager John Cada. This agreement (1992 lease enclosed) noted that 3495 AUMs would be allowed for 1992 through 1995. After that, FWP would reduce grazing to around 500 Animal Units (which would reduce AUMs to approximately 2000 on the WMA). This agreement was made to give the Association time to prepare for the eventual cuts. The Association has been repeatedly reminded that these reductions are coming, even though we have continued to extend their lease with the same 1992 AUM figure through the 1997 grazing season. These recent extensions have been in large part due to our waiting for the successful completion of the Turner/DNRC land trade that would affect the amount of acreage we would ultimately have to base our grazing management on. This trade has been delayed by litigation and we feel we need to begin reducing AUM use on the WMA to a level more realistic to our final goals. Note we are only requesting a partial reduction for 1998.”*

During this time period, there was strong concern expressed over domestic sheep trailing across the WMA and that there should be no grazing on the WMA.

On May 12, 2000, the FWP Commission adopted a new 10-year lease. The lease involved a six pasture rest rotation system including FWP deeded lands, DNRC lands leased by FWP, and the McGuire DNRC lands leased by the Association included under an exchange of use agreement. The lease for this system allows up to 3310 AUMs annually and a grazing season length of June 15 to October 15. The Robb/Ledford WMA Management Plan (See Appendix A) and the 2000 Robb/Ledford Coordinated Grazing System Plan (See Appendix B) outlined the direction with

the adopted AUM grazing level. Under the existing Grazing Plan, “total annual grazing intensity ranges from 5.2 to 6.5 acres per AUM, and averages 6.0 acres per AUM over the three year grazing cycle.” This is the same grazing intensity that FWP was striving for when the 500 Animal Units were contemplated in Joel Peterson’s 1998 memo as outlined above.

The reason FWP could accommodate the higher Animal Unit levels (>500) under the 2000 grazing lease is because the Turner Land exchanges were completed placing the McGuire Place (3,600 acres) in DNRC ownership leased by the Ledford Creek Grazing Association. This lease was incorporated into the Robb/Ledford Coordinated Grazing System (R/L system), all of which was completed by 2000.

In order to accommodate the level of grazing as adopted by the FWP Commission, the Robb/Ledford Grazing Management Plan outlines improvements that needed to be put in place. In summary, improvements included:

- 1) removing old internal fences which would have been done regardless of whether cows were allowed to graze on the WMA,*
 - 2) construction of the Kelly Springs water line and the Hogback water line to address cattle distribution,*
 - 3) construction of new interior pasture fences, and*
 - 4) if needed, a one strand electric fence at lower elevations to keep cows off of tall larkspur until late July after which its toxicity to cattle drops significantly.*
- All but one of the improvements was completed as of 2008.*

In 2008, it was decided that the Hogback water line would not be constructed based on the following reasons:

- 1) it would not fix the problems associated with Robb Creek riparian degradation,*
- 2) it would not fix problems associated with tall larkspur poisoning which has created a bottleneck in not complying with movement dates in the existing grazing plan,*
- 3) it would not quantifiably improve wildlife habitat, and*
- 4) cost (\$112,000 to 142,000) versus benefit does not justify the expense.*

It has taken 8 years to remove old fences, construct new fences, finish the Kelly Springs Water line, and to get the system fully operational. The system has been fully operational since 2007, one full grazing rotation. The latest and final improvement was the construction of a mid-elevation, 1-strand electric fence that would allow a separation of cattle from the main distribution of tall larkspur until larkspur had matured to a less toxic state for livestock. It is now obvious that even with the fence, capacity is too limited at the lower elevations to meet the standards outlined in the grazing plan of 6 acres per AUM during a two-week window. The plan prescribes a movement from the early use pasture to the next higher elevation pasture to occur in early July. During the last 10 years, that movement has not taken place until the end of the third week of July, and in one year not until mid-August driven by a concern over tall larkspur poisoning.

Investments Completed at the Robb/Ledford WMA

	<u>Cost</u>
<i>Interior fencing</i>	<i>\$149,081.05</i>
<i>Solar/wind power system</i>	<i>\$ 25,008.97</i>
<i>Kelly Springs Pipeline</i>	<i>\$121,972.32</i>
<i>Fencing – McGuire/Ledford/ E Robb Creek/remove cattle guard at Ledford Creek</i>	<i>\$ 69,884.42</i>

<i>Grazing fence –</i>	<i>\$ 94,947.00</i>
<i>Dismantle 4 Bldg Robb/Blacktail; repair doors, window, remove cross fence</i>	<i>\$ 2,197.50</i>
<i>Fence removal/cattle guard/demolish bldg</i>	<i>\$ 8,000.00</i>
<i>South end fence removal</i>	<i>\$ 4,999.00</i>
<i>Install cattle guard/gate/remove fence upstream on Ledford Ck/remove hay corrals</i>	<i>\$ 4,999.00</i>
<i>Install entrance sign</i>	<i>\$ 4,997.06</i>
<i><u>Survey costs</u></i>	<i><u>\$ 850.00</u></i>
<i>Total Costs</i>	<i>\$486,936.32</i>

Some of the above costs cover expenses that would have been incurred had no cows been allowed to graze or under a much lower stocking rate than approved by the FWP Commission. The cost of improvements that were required based on the FWP Commission approval of the 2000 grazing plan is \$460,893.76.

Need for Proposed Action

In the 1999 Management Plan developed for Robb/Ledford Wildlife Management Area, nine management objectives were identified in order to reach the goals of the WMA to maximize the productivity of the soil, vegetation, watershed, and game and nongame wildlife that are products of that environment. A summary of those objectives include:

- (1) maintenance or improvement of the basic resource including vegetation, soil, and water, (2) expanding benefits of FWP management to adjacent DNRC lands,*
- (3) showcase the WMA as an area demonstrating where wildlife and livestock can co-exist while maintaining a healthy rangeland,*
- (4) provide winter forage for elk,*
- (5) provide habitat for all wildlife utilizing the WMA,*
- (6) incorporate adjacent public lands into management of the WMA,*
- (7) provide adequate public access,*
- (8) maintain the natural character of the land, and*
- (9) increase public awareness and appreciation for the diversity of wildlife on the WMA.*

Livestock grazing was identified as a means to meet some objectives. Formal grazing leases have been used on the WMA since 2000 under the guidance of a rest-rotation grazing plan which has met some of the management plan's objectives.

With one exception, it has taken the last eight years to complete the scheduled improvements that would fulfill FWP's commitments under the current grazing system plan and enable FWP to fully implement the grazing plan. The exception was the decision in 2008 not to proceed with the construction of the Hogback Waterline. To reiterate that decision, 'not to construct' was based on the following:

- 1. it would not fully address riparian concerns along Robb Creek,*
- 2. it would not fix problems associated with tall larkspur poisoning which has precluded compliance with movement dates in the existing grazing plan,*
- 3. it would not quantifiably improve wildlife habitat, and*
- 4. cost (\$112,000 to 142,000) versus benefit does not justify the expense.*

During the last 10 years under the 2000 lease, the lower elevation pastures had a two-week grazing prescription without hard movement dates. What has occurred during that year period is an actual use in the low elevation pastures of five to eight weeks resulting in a 2-3 acre per

AUM grazing intensity, more than double what was prescribed. This high grazing intensity has resulted in a loss of cover and forage for wildlife that has far exceeded prescription and contributed to riparian resource concerns on lower Robb Creek. As a result, objectives 2, 3, 4, 5, 8, and 9 as described in the 1999 management plan have not been fully met in many years for the system as a whole.

In order to address the movement prescriptions in the grazing plan, hard dates would be implemented in any new lease that would only allow for no more than two weeks of grazing in the early use pasture. The livestock owners have committed to the use of “silent herder,” a mineral supplement commonly used to minimize tall larkspur poisoning. The livestock owners have committed to accepting those losses without violating movement dates.

Livestock grazing was identified as a means to meet some objectives, and formal grazing leases have been used on the WMA since 2000 under the guidance of a rest-rotation grazing plan. This has met some, but not all, of the management plan’s objectives. Riparian corridors are responding positively since the implementation of the R/L System with the exception of small areas along Robb Creek. Under any new lease, the installation of the riparian fence is expected to allow improvement in those areas.

8. Alternatives:

Alternatives A, B, C, and D were all developed to provide modification to further address habitat and wildlife concerns while demonstrating compatibility of potentially competing resource uses in ways that try to honor and respect the idea of conservation of natural resources on landscapes where people live, work, and recreate.

The following are general proposed lease terms common to all grazing Alternatives:

- 1) For partial payment (\$25,000) of this lease under the exchange of use agreement, the Ledford Grazing Association (Association) will fully incorporate the management of the DNRC McGuire Section into the WMA,*
- 2) The Association would agree to maintain the existing WMA fencing and FWP would reimburse the Association for the labor costs at a fixed negotiated rate,*
- 3) Vaccination of the Association’s livestock per Montana law,*
- 4) The Association must follow the State of Montana’s Brucellosis Action Plan,*
- 5) The Association’s livestock must reside in the state for 30 days prior to being placed on the WMA to prevent the invasion of noxious weeds,*
- 6) The livestock permittees are responsible for moving their cattle at the prescribed times regardless of tall larkspur conditions, and they are entirely responsible for protecting their animals from larkspur poisoning,*
- 7) This will be a three-year lease to allow time to evaluate the effectiveness of the new terms in addressing forage allocation, vegetative cover, nongame inventory information, and other conditions throughout an entire 3-year rotation. FWP’s intent is to allow for adjustments to lease terms if deemed necessary and to enter into a longer-term lease after that time,*
- 8) The new lease will be with individual members as represented by the Association.*

The success of any of the grazing alternatives hinges upon compliance by the Association with movement dates, regardless of the condition of tall larkspur toxicity. Table 1

summarizes the Alternatives with regard to grazing rotations, animal units, animal unit months, and grazing season length.

Alternative A: The grazing system would run from June 22 to October 15, with a maximum of 2955 AUMs.

This alternative will continue the consolidation of BLM and DNRC lands along with FWP deeded ground on the WMA into a coordinated grazing system called the Robb/Ledford Coordinated Grazing System (R/L System). Livestock utilizing this system would also make coordinated use of the adjacent FS Snowcrest Grazing Allotment (Forest Service Allotment) and Blacktail BLM Grazing Allotment (Bureau of Land Management Allotment). FWP presently leases over 10,000 acres of DNRC lands.

An additional 3,600 acres of DNRC would be included in the R/L System through an exchange of use agreement with the lessees, the Ledford Creek Grazing Association. This exchange of use allows DNRC lands (known as the McGuire section) leased by the Association to be included in the R/L system. In exchange, the Association receives grazing rights in the R/L System by the terms set by the lease agreement. (See Appendix C Draft Grazing Lease and Exchange of Use Agreement).

Grazing System Methodology

*The R/L System will involve rest-rotation grazing principles described by Hormay (1970). Livestock grazing would occur during a 3.75-month period from June 22 until October 15 each year. Livestock would be rotated through the low elevation and high elevation pastures. On June 22nd cattle would be placed in a low elevation pasture until July 5th. All cattle will be moved off lower pastures **on or before July 6** to high pastures regardless of the maturity of tall larkspur. On the 6th all the cattle will be moved to high pastures. On July 16, 352 animal units are moved to the Forest Service (FS) allotment, the remaining livestock (766 animal units) stay within the R/L System on the first high elevation pasture until vegetation matures and produces seed around August 15th. On August 15, a group of 400 cattle are moved off of the R/L System to the BLM Allotment and the remaining livestock (366 animal units) on the R/L system would be moved to a second high elevation pasture. On September 15 and October 1st cattle from the BLM and FS allotments, respectively, would return to the R/L system joining the cattle in the second high elevation pasture. All of the livestock that had entered the R/L System in June are now back in the R/L system on October 1. On October 8, livestock would be moved into the last (low elevation) pasture using it as a gathering/trailing pasture. It is preferred that cattle remain on the high pasture until their departure from the R/L System on October 15, but the low pasture will be utilized as necessary, particularly in the event of early snows which can push cattle down in elevation. See Appendix B pages 287-29 for diagrams showing the rest-rotation system by WMA pasture.*

Table 1. Comparison of Grazing Alternatives, movement dates and Animal Units (AU), Animal Unit Months (AUM), and Length of Season (months).

ROTATION	ALTERNATIVES					Current 2000 Grazing Lease*
	A	B	C	D	E	
On Date to First Low	June 22	July 1	June 22	July 15	No Grazing	June 15

<i>Elevation Pasture</i>						
<i>AU</i>	1118	1118	500	1118		1118
<i>Move Date to First High Elevation Pasture</i>	July 6 On or Before	July 16	July 6	July 18	No Grazing	**Early July real movement dates have ranged from July 15 to August 8 due to concerns over tall larkspur poisoning
<i>AU</i>	1118 to 7/15 766 7/15-8/15	766	500	766		1118 to 7/15 766 7/15-8/1
	352 go to FS allotment 7/15	352 go to FS allotment 7/15		352 go to FS allotment 7/18		352 go to FS allotment 7/15
<i>Move Date to Second High Elevation Pasture</i>	August 15	August 15	August 15	August 15	No Grazing	August 15
<i>AU</i>	366 AU to 9/15 766 9/16 to 10/1 1118 10/1 to 10/8	366 to 9/15 766 9/16 to 10/1 1118 10/1 to 10/8	500	366 to 9/15 766 9/16 to 10/1 1118 10/1 to 10/8		366 to 9/15 766 9/16 to 10/1 1118 10/1 to Oct
	400 to BLM 8/15-9/15 400 return from BLM 9/15 352 return 10/1 from FS	400 to BLM 8/15-9/15 400 return from BLM 9/15 352 return 10/1 from FS		400 to BLM 8/15-9/15 400 return from BLM 9/15 352 return 10/1 from FS		400 to BLM 8/15-9/15 352 return 10/1 from FS
<i>Move Date to Second Low Elevation Pasture</i>	October 8	October 8	October 8	October 12	No Grazing	October 8
<i>AU</i>	1118	1118	500	1118		1118
<i>Off Date</i>	October 15	October 15	October 22	October 15	No Grazing	October 15
<i>Maximum AUM</i>	2955	2676 (-559 AUMs from Alt A)	2527 (-708 AUMs from Alt A)	2117 (-1118 AUMs from Alt A)		3235
<i>Months of Grazing</i>	3.75	3.5	4	3	No Grazing	4

*Alternative not considered due to not meeting WMA objectives.

****This has resulted in cattle remaining in the first lower elevation pasture to 1 to 1.5 months which has far exceeded a prescription of 2 weeks**

In this system, one-third of the pastures would be grazed from June 22 until seed ripe (August 15), another third would be grazed from seed ripe until October 22, and the other third would be rested. Annual livestock grazing on the WMA would be rotated so that over a three-year period each pasture receives all of the different treatments. Plants that are grazed by cattle during the growing season (June 22 through August 15) receive rest from livestock grazing during the next growing season followed by complete rest from livestock use the third year. The animal-stocking

rate will be based on levels that will allow for the maintenance and enhancement of riparian and wildlife values within the system. Considering only the acreage grazed on a particular year and an approximate average of 6 acres/AUM (animal unit months), there would be a maximum of 1118 cow/calf pairs and steers allowed on the WMA. The R/L system would also employ riparian grazing strategies described by Ehrhart and Hansen (1997) and Ehrhart and Hansen (1998) that include salting, herding, and stock water development.

Additionally under this alternative, FWP would remove the previously installed electrical fencing in the higher pastures that was used to deter livestock grazing of the tall larkspur. Maintenance costs for the remaining pasture fencing is approximately \$5,000 annually.

General Terms of the Lease

- For partial payment (\$25,000) of this lease under the exchange of use agreement, the Ledford Grazing Association (Association) will fully incorporate the management of the DNRC McGuire Section into the WMA.
- The Association would be allowed to graze a maximum of 2,955 AUM or 1,118 cow/calf pairs and steers.
- Livestock grazing would occur during a 3.75-month period from June 22 until October 15 each year using the rest-rotation system described above.
- The Association would agree to maintain the existing WMA fencing, and FWP would reimburse the Association for the labor costs at a fixed negotiated rate.
- Vaccination of the Association's livestock per Montana law.
- The Association must follow the State of Montana's Brucellosis Action Plan.
- The Association's livestock must reside in the state for 30 days prior to being placed on the WMA to prevent the invasion of noxious weeds.
- The livestock permittees are responsible for moving their cattle at the prescribed times regardless of tall larkspur conditions, and they are entirely responsible for protecting their animals from larkspur poisoning.
- No more than two weeks of grazing will be allowed in the lower pastures in the spring or fall treatments. More specifically in the spring, livestock will be required to move **on or before July 6** into the high elevation pasture.
- If lessees are unable to comply with the on or before July 6 movement requirements during any given year of the existing lease, the **turn out date will default the following year to July 1 with movement to the high elevation pasture on or before July 15 throughout the remainder of the lease term.**
- This will be a three-year lease to allow time to evaluate the effectiveness of the new terms in addressing forage allocation, vegetative cover, nongame inventory information, and other conditions throughout an entire three-year rotation. FWP's intent is to allow for adjustments to lease terms if deemed necessary and to enter into a longer-term lease after that time.
- The new lease will be with individual members as represented by the Association.
- A new lease will be adopted at the November 2012 FWP Commission meeting. It will be based on the effectiveness of this lease in adhering to movement requirements as well as vegetation and wildlife data that will be collected during the next three years. A primary criterion will be based on tall larkspur. If larkspur poisoning becomes burdensome to the

lessees, the new lease will be default to Alternative B or alternative D as described and analyzed in this EA and Decision Notice.

Riparian Fence

In conjunction with the new grazing lease, FWP proposes to install a 3.84-mile riparian fence (\$43,271) along Robb Creek near the WMA's headquarter cabin in order to redirect cattle movements along the creek to designated access points for watering. This will protect the riparian vegetation from livestock trampling and browsing. See Appendix D for a map of the location of the water gap fence.

This alternative carries the least amount of negative impacts to livestock operations while at the same time satisfying resource/wildlife needs. This Alternative has been discussed with the Association and it is our understanding that it would be compatible with their interests. The lease length established for three years (one rotation) would allow FWP to evaluate against objectives and adapt language in any new lease beyond that time in a way that would address additional changes to the R/L System.

Alternative B: Similar to Alternative A, but the grazing system would run from July 1 to October 15, a shorter grazing period with a maximum of 2676 AUMs.

Under this alternative, livestock grazing would occur during a 3.5-month period from July 1 until October 15 each year. Cattle would move into the low elevation pasture on July 1 and remain there for two weeks. On July 15, cattle (766 animal units) would move into the first high elevation pasture, and 352 animal units would leave the R/L system and move to the FS allotment. On August 15, 400 animal units would leave the R/L system and move to the BLM allotment and the remaining 366 animal units would move to a second high elevation pasture within the R/L system. On September 15 and October 1, cattle from the BLM and FS allotments, respectively, would return to the R/L system joining the cattle in the second high elevation pasture. All of the livestock that first entered the R/L system in July are now back in the system. On October 8, livestock would be moved into the last (low elevation) pasture using it as a gathering/trailing pasture. It is preferred that cattle remain in the high pasture until their departure from the R/L system on October 15, but the low pasture will be utilized as necessary, particularly in the event of early snows which can push cattle down in elevation.

The late arrival of the cattle would allow for a longer period of growth for vegetation before being grazed on both the low and high elevation pastures allowing for a greater amount of residual forage for wildlife. It would also shorten the length of time cattle are exposed to tall larkspur when it is most toxic.

Other terms of a grazing lease agreement would be the same as under Alternative A.

Outside of Alternative A, this alternative would carry less negative impacts to livestock operations but also satisfy resource/wildlife needs. Although some aspects of this Alternative (shorter grazing season, reduced stocking rate, etc.) have been discussed over the years with the Association and the public, it is unknown if this Alternative would be compatible with the Association's interests.

Alternative C: Same as Alternative A but with a limitation of 500 animal units, with a maximum of 2527 AUMs.

Under this alternative, the maximum number of cattle allowed within the grazing system pastures would be 500 animals. This would be approximately half of the number of cattle allowed under Alternative A. A conservative number of cattle moving within the grazing system would translate into a greater amount of forage and cover available for game and nongame wildlife species.

Other terms of the grazing lease agreement would be the same as Alternative A.

This alternative would have more negative impacts to livestock operations but at the same time more fully address cover and forage availability for wildlife as compared to Alternatives A and B. Although the 500 animal unit stocking rate has been discussed and was presented to the FWP Commission, Association, and public during the developmental years of the R/L System, the higher stocking rate was adopted by the FWP Commission for the 2000 lease along with direction to construct the improvements. It is unknown if this Alternative would be compatible with the Association interests.

Alternative D: Shorter grazing season, with no riparian zone fencing, allowing a 3-day trailing activity through the low elevation pastures beginning July 15 with an arrival date on the upper elevation pasture of July 18, with a maximum of 2117 AUMs.

Under this alternative, livestock grazing would occur during a three-month period from July 15 until October 15 each year. Cattle would enter the R/L System in the first low elevation pasture on July 15 and return to private land on October 15. The full complement of cattle (1118 Animal Units) would be allowed to trail through the first low elevation pasture for three days beginning July 15 arriving in the first high elevation pasture on July 18. July 15 is also when 352 animals (from the full complement of cattle) are moved to the Forest Service (FS) allotment. Under this alternative, these cattle would be allowed to graze and travel through the lower pasture to arrive on or before the July 18 on the FS allotment. The remaining livestock, 766 Animal Units, would arrive on the higher elevation pasture on the R/L System on July 18 where they would remain until vegetation matures and produces seed around August 15. On August 15, 400 cattle would then be moved off of the R/L System to the BLM Allotment. The remaining livestock (366 Animal Units) on the R/L System would be moved to a second high elevation pasture. On September 15 and October 1, cattle from the BLM and FS allotments, respectively, would return to the R/L System joining the cattle in the second high elevation pasture. All of the livestock that had at first entered the R/L System in June are now back in the R/L System on October 1. On October 12, livestock would be moved into the last (low elevation) pasture, using it as a gathering/trailing pasture. It is preferred that cattle remain on the higher pastures until their departure from the R/L System October 15, but lower pastures will be utilized as necessary, particularly in the event of early snows which pushes cattle down in elevation.

Under this alternative, no riparian zone (additional) fencing would be required along Robb Creek due to the short duration, three days in one low elevation pasture in July and three days in August in the late use low elevation pasture. Cattle would arrive in the upper pasture (containing tall larkspur) almost two weeks later than Alternative A, lessening the tall larkspur poisoning concern. A significantly larger amount of cover and forage would be left for wildlife in the lower pastures as compared to Alternatives A, B, and C.

This alternative carries more negative impacts to existing livestock operations while carrying the least amount of negative impacts to wildlife and their habitats as compared to Alternatives A, B, and C. Although some aspects of this Alternative (shorter grazing season, reduced stocking rate, etc.) have been discussed over the years with the Association, it is unknown if this Alternative would be compatible with the Association interests.

Alternative E: No Action, discontinue the grazing lease and halt all grazing on the WMA.

This alternative would involve terminating the livestock grazing on 32,378 acres participating in the R/L Grazing System. FWP would no longer provide grazing oversight and guidance on the 3,600 acre DNRC McGuire section. Furthermore, since the Ledford Creek Grazing Association would likely continue to graze their cattle within the McGuire section, FWP would need to fence the boundary between the McGuire section and WMA to restrict cattle movements. The estimated costs of that fence to FWP would be \$120,000 based upon costs from recent fencing projects at other WMAs.

Under this alternative, the previously installed improvements (water system and fencing) within the WMA for the benefit of R/L grazing system would be abandoned, removed, or reconfigured. Since 2000, FWP has invested \$460,893 into the livestock watering system from Kelly Springs and removed old fencing and installed new fencing to meet the pasture designations of the R/L System. The water system at Kelley Springs would continue to require some maintenance and be used by down-line users even though the WMA specific portions might be turned off. In the future, internal fencing completed for the rest-rotation system would likely be removed from within the WMA at an additional expense to FWP. Benefits from a coordinated and collaborative effort between sportsmen, ranchers, and FWP for the use of the WMA by wildlife and livestock would be lost.

This alternative would have the greatest negative impact to existing livestock operations but would also provide the maximum amount of cover and forage available to wildlife.

9. Other Livestock Activities within the WMA

Domestic sheep trailing has been allowed through the upper reach of the WMA prior to FWP purchasing the property from the Rocky Mountain Elk Foundation. Annual sheep trailing across the WMA has been allowed by FWP since the acquisition in 1988.

The FWP Commission approved the reintroduction of bighorn sheep in the Greenhorn Mountains with the addition of a Memorandum of Understanding (MOU) that was signed by FWP, the domestic sheep producers in the vicinity of the Greenhorns, the USDA Forest Service, and the Bureau of Land Management. That MOU allows for the continued grazing of domestic sheep on public lands, including trailing. It was signed after the Commission approved the reintroduction at their May 2002 meeting. The current sheep trailing is operating consistent with the commitment made in the MOU.

The administrative rules that guide commercial uses on WMAs became effective in January 2007. FWP intends to apply those rules to the Robb/Ledford sheep trailing activity beginning in 2010. FWP will start that effort in Fall 2009 in the form of an environmental review. At this point, we will continue to operate according to the commitments made in the Greenhorns MOU regarding sheep trailing. The following is an outline of the process and timelines FWP will use to evaluate the domestic sheep trailing and the Greenhorns Sheep transplant EA and MOU:

- 1) Scoping on both will occur formally from September 15 through October 15, 2009,*
- 2) Preparation of a Draft environmental assessment (EA) for sheep trailing as a commercial use by January 15, 2010 with a public review period extending through February 15, 2010,*
- 3) Prepare a final EA and Decision Notice for the sheep trailing as a commercial use and finalize a revised or affirm existing Greenhorns Sheep EA and MOU by March 15, 2010.*

II. EVALUATION OF IMPACTS ON THE PHYSICAL ENVIRONMENT

1. Vegetation

The area ranges in elevation from approximately 6,000 feet along Ledford and Robb Creeks to 9,200 feet on the upper reaches of the WMA. The basic character of the land involves open rolling rangelands intersected with perennial streams and a small amount of timber in the upper reaches. Rangelands are grass and grass-shrub mixes with timber, primarily Douglas fir. Bluebunch wheatgrass and Idaho fescue grasslands are the predominant vegetation with some Douglas fir occurring at higher elevations. Sagebrush (both big sage and black sage), rabbitbrush, juniper, and mountain mahogany occur in association with these grass species. Willow stands are common along stream courses and in wet areas. Scattered patches of aspen and serviceberry can be found in areas where soils have a higher moisture level.

Average annual precipitation is 15-20 inches, much of which occurs in the form of snow. Some rock outcrops exist, but soil is generally free of gravel to depths of 6-12 inches.

From about 1958 to 1988, the previous owners of the acres associated with the WMA grazed about 2,200 cow/calf pairs on the range. This use occurred on an annual basis and followed a semi-regular schedule that involved using the same pastures at the same time each year. Grazing occurred generally from early May through November every year. In addition during the majority of the previous ownership, several hay meadows along Robb and Ledford Creeks were irrigated for cattle grazing. This continued until the latter 1980's when the irrigation ceased. Prior to the previous ownership, it is evident that these meadows were probably harvested for hay.

Under FWP's ownership of the property and the implementation of a rest-rotation grazing system, riparian areas along all the WMA's creeks have responded positively and are visibly improved. Challenges still linger for small portions of Robb Creek where repeated livestock movements and pressures have impacted the riparian vegetation.

There have been ongoing (1999 through 2008) riparian inventories conducted (by Bitterroot Restoration, Inc.) on the various streams that flow through the Robb/Ledford Wildlife Management Area. Most of the stream riparian areas were heavily and negatively impacted

prior to FWP ownership. Most have at least stabilized, and many are showing improvement in physical site factors from 1999 to 2008. Based on a 2005 inventory, one stream has shown a decline in general riparian health since the 1999 inventory. "Over the six years there has been good improvement on overall vegetation cover of the riparian zone on Robb Creek, including improvements in preferred tree and shrub species regeneration and in browse utilization rates of these species. On the physical side of the assessment, Robb Creek has seen a decline since 1999. Channel incisement and human-caused alterations to both the banks and to the rest of the riparian zone have more then offset the modest improvements in rootmass protection of the banks and in the amount of human-caused bare ground." (Appendix E - Riparian and Wetland Inventory and Health Assessment on Robb Creek and Ledford Creek in the Robb/Ledford Wildlife Management Area, W. Thompson & P. Hansen, February 2006). This decline is primarily attributed to lack of water in upland areas and a dependency on Robb Creek from two different pastures by livestock. There is high and concentrated pressure along about 2.5 miles of Robb Creek that is causing this decline in health. Under Alternatives A, B, and C, a riparian fence will need to be constructed to restrict livestock access to water. Paul Hansen (Bitterroot Restoration, Inc.) has consulted with FWP and provided site-specific recommendations for three water gaps along Robb Creek that would rectify the downward trend. Because of the short duration of use in the low pasture (only three days in July and three days in October), a riparian fence along Robb Creek as proposed in Alternatives A, B, and C will not be needed in Alternative D.

Long-term vegetation monitoring sites were established on the Robb Ledford Wildlife Management Area (WMA) in 2003 and 2004 at five locations. All five sites provide quantified Daubenmire canopy cover data. Sites 4 and 5 also quantify big sagebrush canopy cover using the line-intercept method. The vegetation monitoring project on the WMA includes 40 transects, 80 photo points, 400 photo plots, and 400 Daubenmire quadrats. The monitoring sites are measured approximately once every five years, and to date have been read in 2003, 2004, and 2008. Data collected to this point are not enough to suggest a long-term vegetation trend on the game range but do offer information describing the current vegetation composition at the five monitoring sites. Please refer to Appendix F -Vegetation Monitoring Transect Data for data details. There will be 3 additional monitoring sites in the lower pastures that will be established this spring, and will include transects, photo points, and photo plots.

In general, the WMA hosts a variety of desired native plants in relatively desired amounts. Repeat vegetation measurements do not suggest a decline in health and vigor of the plant communities. Non-native plants are present on the WMA but in small amounts and are not causing a negative shift in plant composition. The soil surface data indicates stability of the soil surface with no signs of accelerated soils loss.

Noxious weeds that have been identified on the WMA include: spotted knapweed, Canadian thistle, field scabiosa, blackleaf henbane, hound's tongue, musk thistle, and mullen. The largest and most dispersed infestation of noxious weed is hound's tongue. The other varieties are found in smaller amounts, and no leafy spurge has been identified on the WMA.

Tall larkspur (*D. barbeyi*, *D. occidentale*) is widely distributed in the upper pastures of the R/L System. Larkspur is very palatable to cattle but is known to be toxic to them. The plants are most

toxic during early growth, but toxicity gradually declines over the growing season. Silent Herder will be administered by the Association to their cattle in the future to protect them from the effects of the larkspur's toxins.

Alternative A: The grazing system would run from June 22 to October 15 with a maximum of 2955 AUMs. The degree and timing of grazing will determine the level of impacts on the land. Livestock grazing impacts soil and vegetation, and hoof action can remove vegetative cover. The impacts of these activities would not be detrimental to overall soil and vegetative health in a properly managed system. Livestock grazing can be managed in a manner that will allow for soil and vegetation maintenance and/or improvement (Anderson and Scherzinger 1997, Frisina and Morin 1991, Frisina 1991, Alt et al. 1992, Yeo et al. 1993, and Werner and Urness 1996). Impacts of grazing livestock on the WMA will be mitigated through a properly managed grazing system. Plants need adequate rest in order to increase their root mass and carbohydrate storage. The rest-rotation grazing as developed by Hormay (1970) will allow plants two years of growing season rest out of every three. This allows plants adequate opportunity to increase and/or maintain their vigor. In addition, grazing strategies in riparian areas will include herding, salting, riparian fence and water gap locations, and water distribution systems to reduce the effects of livestock concentrations in these areas (Ehrhart and Hansen 1997, Ehrhart and Hansen 1998). The positive effects of this management system would be manifested on the associated DNRC lands as well as on FWP's deeded ground.

Since the implementation of the grazing management system within the Robb/Ledford Coordinated Grazing System (R/L System), the native compliment of vegetation has been assessed by FWP's Plant Ecologist. In general, the WMA hosts a variety of preferred native plants in relatively desired amounts. Repeat vegetation measurements do not suggest a decline in health and vigor of the plant communities. Non-native plants are present on the WMA but in small amounts and are not causing a negative shift in plant composition. The soil surface data indicates stability of the soil surface with no signs of accelerated soils loss.

The installation of the water gap fence along Robb Creek through Section 31 T9S, R4W and Section 6 T10S, R4W, and Sections 1, 12, 13 of T10S, R5W will assist in redirecting cattle from eroded streambanks and over grazed riparian vegetation. The establishment of the fence will protect riparian vegetation from further grazing from cattle which will allow willows and other vegetation to become more vigorous over time and stabilize streambanks.

The spread of noxious weeds within the WMA is controlled and managed primarily through the application of herbicides per the guidance of the 2008 Integrated Noxious Weed Management Plan and the regional weed management plan. Through annual inventories and strategic applications, spotted knapweed is contained and limited to specific areas. Other noxious weed infestations continue to challenge WMA staff, especially along riparian areas where the application of herbicides is difficult to use.

Under this Alternative, continuation of grazing livestock on the WMA is not expected to cause irreversible negative consequences to desired plant species because impacts to vegetation will be managed by the rest-rotation R/L System.

Alternative B (Shorter Grazing Period): The implementation of this alternative is anticipated to benefit both the lower and higher pasture vegetation by decreasing the grazing pressure in both areas, increasing the residual amounts of forage for wildlife. The delay by 1 week, as compared to Alternative A, in placing cattle onto the upper pastures will also allow additional time for vegetation in the upper elevation to mature before being grazed by cattle.

A later placement date would also mean that tall larkspur would have a longer period to mature, becoming less toxic before the presence of cattle on the landscape when cattle graze vegetation in the high pastures.

Under this Alternative, continuation of grazing livestock on the WMA is not expected to cause irreversible negative consequences to desired plant species because impacts to vegetation will be managed by the rest-rotation R/L System.

Alternative C (Decrease Number of Cattle): By limiting the number of cattle placed within the system, overall grazing pressure on riparian and non-riparian areas will be lessened and an increased amount of forage and cover will be available to wildlife. Some minor impacts to vegetation will still occur.

Under this Alternative, continuation of grazing livestock on the WMA is not expected to cause irreversible negative consequences to desired plant species because impacts to vegetation will be managed by the rest-rotation R/L System.

However, if this alternative is not compatible with the Association's interest, impacts would be similar to those described for the DNRC McGuire property under Alternative E. The Association would likely remove their McGuire DNRC lease from the R/L System and FWP would pursue other options.

Alternative D (Shortest Grazing Season, No Riparian Fence): The implementation of this alternative is anticipated to benefit residual cover and forage for wildlife by limiting use in the lower series of pastures to only three days in July and three days in October as compared with Alternatives A, B, and C. These low elevation pastures are also the most limiting in terms of acres as compared to the high elevation pastures. Impacts to riparian shrubs and forbs are expected to be minimal since the animals would be present for a very short period of time.

Under this Alternative, continuation of grazing livestock on the WMA is not expected to cause irreversible negative consequences to desired plant species because impacts to vegetation will be managed by the rest-rotation R/L System.

However, if this alternative is not compatible with the Association's interest, impacts would be similar to those described for the DNRC McGuire property under Alternative E. The Association would likely remove their McGuire DNRC lease from the R/L System and FWP would pursue other options.

Alternative E (No Action): Under this alternative, the coordinated grazing management plan for the 32,378 acres would cease to continue. The vegetation within the 28,098 acres owned or

leased by FWP as the WMA would no longer be subjected to grazing pressures. Accordingly, forage and cover for wildlife would be expected to increase. As during the implementation of the R/L System, FWP will continue to monitor and manage noxious weeds on the WMA.

The Ledford Creek Grazing Association would likely continue to use the DNRC McGuire property for grazing pastures as they have done in the past. The benefits to vegetative health of the R/L System at that site could be lost because the removal of the rest-rotation grazing routine. In addition forage availability and cover would be severely reduced with an anticipated much higher stocking rate than the area would experience under the coordinated grazing system.

It is unknown what future grazing scenarios the BLM might adopt if the R/L System is eliminated.

2. Fisheries and Water Resources

The WMA contains portions or all of Crows Nest, Ledford, Robb, Rock, Swamp, and Taylor creeks. A viable fishery presently occurs on the WMA (for a full report of the fisheries values on the WMA, please consult the Management Plan). Species present include rainbow, rainbow-cutthroat hybrids, brown trout, brook trout, Westslope cutthroat trout (WCT), Mountain whitefish, and mottled sculpin. WCT populations in the Rock Creek drainage are nearly pure strains of the species. Historic livestock and farming uses have influenced stream and riparian conditions, but all the riparian corridors have responded positively since the implementation of the R/L System with the exception of small portions of Robb Creek.

FWP acquired 22 water rights consisting of one stock watering right and 21 irrigation rights when it purchased the property in the late 1980's. The sources for the irrigation rights are Ledford, Robb, and Warm Springs creeks and a tributary spring to the W. F. Ruby Creek.

Ledford Creek supports rainbow, rainbow-cutthroat hybrids, brown trout, and mottled sculpin. Based on an inventory in 1991, total densities of trout were estimated at approximately 240 per mile. Brown trout were the predominant species representing 74% of the catchable (6 inches or longer) fish.

The East Fork of Blacktail Creek fishery is primarily comprised of brook and rainbow trout. Mountain whitefish and mottled sculpin are also present. In 1995, a short section of stream was inventoried downstream of the mouth of Rough Creek. Brook trout were the only trout species captured. Sizes ranged from 4 to 9 inches, and densities were very low, estimated at 66 per mile. Westslope cutthroat trout (WCT) are present in the headwaters at similar densities. Analysis of several fish indicated they were 88% genetically pure. Instream flow reservation was requested and granted at 18 cubic feet per second.

Robb Creek is dominated by brook trout but maintains a small population of WCT. Mottled sculpin are also present. A survey in 1991 estimated catchable size fish at 496 per mile. Brook trout averaged nearly eight inches in length with the largest exceeding 12 inches. Westslope cutthroat trout averaged only 6% of the game fish population. Sizes ranged to 9 inches in length. Habitat in the surveyed area consisted primarily of a network of beaver ponds connected

by short reaches of stream. The majority of habitat was provided by the ponds or woody debris associated with the dams.

Rock Creek contains exclusively WCT. Population densities range from 160 to 300 catchable size fish per mile with the largest fish exceeding 12 inches in length. Fish habitat is limited throughout most of the stream. Two reservoirs appear to provide over-winter habitat to a significant portion of the population. Primary factors influencing the habitat include the outlet of the upper reservoir which has eroded a 15-foot gully for approximately 200 yards. This has largely obliterated habitat features for a significant distance downstream. In addition, a natural slump has confined the channel resulting in steep, eroding banks which continue to introduce high levels of sediment.

The genetic status of this population has not been adequately determined. Preliminary analysis of cutthroat collected in 1995 indicated this population was genetically pure. Subsequent fish collected in 1997 and analyzed in 1998 suggest that the population is either slightly hybridized or carries a rare WCT allele that is electrophoretically indistinguishable from that characteristic in Yellowstone cutthroats or rainbow trout.

Fisheries inventories have not been conducted on Crows Nest, Taylor, Swamp, or Indian creeks, thus their status as fisheries is not known. No new surveys have been completed within Blacktail, Ledford, Robb, and Rock creeks since 1990s. The diversity of the species at hand does not appear to be effected by the presence of livestock within the WMA.

Alternative A: The grazing system would run from June 22 to October 15, with a maximum of 2955 AUMs. Healthy riparian vegetation and stable stream banks are critical to maintaining a properly functioning stream, clean water, and quality fish habitat. The components of the R/L System established a rest-rotation system, livestock herding, pasture layout, and the establishment of upland water sources (i.e. water tanks) to ensure impacts to riparian areas decrease and their overall health is improved. These methods have proven effective in riparian management systems (Ehrhart and Hansen 1997, and Ehrhart and Hansen 1998).

Livestock will remove certain amounts of vegetation and walk on stream banks in grazed pastures. This situation has the potential to create anywhere from a serious and extensive degradation problem down to a few isolated “sore” areas that might be found in stream crossings, etc. Although intensive livestock grazing prior to FWP’s purchase of the WMA led to a reduction in riparian health on portions of the WMA (Riparian Health Assessment, 1999), the conditions in most of these areas has improved under the 2000 grazing agreement and the R/L coordinated grazing system (Mike Frisina, FWP Range Coordinator, and Paul Hansen, Riparian and Wetland Ecologist, pers. communications). The only exception is along Robb Creek which is within one of the designated lower pasture areas and near the WMA’s headquarters. Because the health of the riparian vegetation continues to struggle within this 2.5 mile stretch of Robb Creek and as part of the proposed lease agreement, FWP will install a water gap fence to redirect cattle movements along the creek to designated spots.

The new water gap fence will follow other wildlife-friendly fencing designs that FWP has used at other WMAs. The design of the fence will be a 4-strand barbed wire with the highest strand

between 38"-40" to allow for wildlife to move across it and the lowest wire at a height of 16"-18" above the ground to accommodate smaller wildlife. There will be two or three water gaps along its length to accommodate the cattle's need to access water while placed there. The design of the water gap fence is not expected to be a barrier to wildlife movements. In addition, this fence will also have a let-down design that will be used when livestock are not present.

As during the previous grazing agreement, protocols for vegetation monitoring were established to ascertain if the grazing system is working to meet the WMA's Management Plan's objectives and identify if management adjustments are necessary. Any significant degradation attributable to livestock will be handled through adaptive management of AUM's, grazing patterns, or whatever means FWP feels necessary to correct the situation.

Under this Alternative, the overall diversity and population of fish species in the WMA's creeks are not expected to be negatively impacted by the presence and movements of cattle through the R/L System pastures.

Alternative B (Shorter Grazing Period) and Alternative C (Decrease Number of Cattle):

Under both of these alternatives, fisheries and water resources within the grazing system would still be subjected to some pressure from cattle on the landscape. In areas where streambanks are not protected by water gap fences, cattle will continue to influence erosion patterns and riparian vegetation. Due to the length of time cattle will be in the low Robb Creek pasture, FWP will still need to construct the water gap fence as in Alternative A.

The regiment of the existing coordinated grazing system would not be altered if Alternatives B or C were implemented, only the duration (shorter in B) and intensity (B and lightest in C) of use would be altered.

Under these Alternatives, the overall diversity and population of fish species in the WMA's creeks are not expected to be negatively impacted by the presence and movements of cattle through the R/L System pastures.

However, if Alternative C is not compatible with the Association's interests, impacts to Robb Creek would be similar to those described under Alternative E for the DNRC McGuire property. The Association would likely remove their McGuire DNRC lease from the R/L System and FWP would pursue other options.

Alternative D (Shortest Grazing Season, No Riparian Fence): *Similar to Alternatives A, B, and C, but there will be no need to construct the water gap fence. There will be very limited use of the low pastures riparian areas due to the very short duration of use.*

Under this Alternative, the overall diversity and population of fish species in the WMA's creeks are not expected to be negatively impacted by the presence and movements of cattle through the R/L System pastures.

However, if this Alternative is not compatible with the Association's interests, impacts to Robb Creek would be similar to those described under Alternative E for the DNRC McGuire property.

The Association would likely remove their McGuire DNRC lease from the R/L System and FWP would pursue other options.

Alternative E (No Action): *The proposed water gap fence on Robb Creek would be unnecessary since cattle would no longer be able to graze within the WMA thus saving FWP the costs of the improvements. The riparian habitat health within WMA deeded lands would either maintain at current conditions or improve with the latter more likely to occur because the vegetation would not be subjected to cattle grazing pressures which includes trampling.*

Fisheries within the WMA would be unaffected, both in diversity and population levels, if this alternative was chosen.

Continuous grazing would likely occur on the DNRC lands (i.e. McGuire property) without the availability of a rest-rotation system within its boundaries which could lead to a further decline in riparian health in those areas and possibly negatively affect fisheries in the headwaters of Robb Creek.

3. Wildlife

The WMA was acquired primarily as an elk winter range. At the time of FWP's acquisition, there was a wintering population of 500-800 elk found on and adjacent to the WMA. Depending on winter conditions and elk distribution, a larger number of elk can be found on and adjacent to the WMA as a part of the approximately 2000-3000 elk that winter in the larger area (Hunting District 324) including the Robb/Ledford and Blacktail WMA's. In recent winters, elk have discovered that there are more prevalent south-facing slopes, available forage, and less snow at the lower elevations in the Spring Brook Creek drainage adjacent to Robb/Ledford WMA. During the most recent winters excluding the winter of 2008-9, many elk spent the majority of the winter in this area. *Appendix G Wildlife Survey and Inventory* shows that in 2009 most elk surveyed were on the WMA (1883 elk out of 2060 total). In 2008, most elk were in Spring Brook (1852 elk out of 2086 total). During the winters of 2006 and 2007, elk distribution was heavily skewed more to Spring Brook than the WMA. Prior to 2006 (2000-2005), elk were divided between this WMA and Blacktail WMA.

This elk population principally summers in the Gravelly and Snowcrest Mountains on the Beaverhead National Forest. However, the bulk of the elk winter range occurs on and adjacent to the Robb/Ledford and Blacktail WMA's.

Mule and white-tailed deer spend spring, summer, and fall on the WMA. In addition, the WMA serves as part of a major winter range for a wintering mule deer population from the Snowcrest Mountains. Recent trend surveys for this area (HD 324) put the population at approximately 300-400 animals ranging in the last ten years from approximately 200 to 800. Of the 358 mule deer in this HD during the 2008 trend survey (the most recent), approximately 54 of those were on the WMA. Most of the mule deer winter range and spring green-up use occurs east and north of the WMA. Whitetail numbers are relatively low on the WMA, probably around 50 or less during the fall and winter.

Moose on the WMA are part of the population in HD's 331 and 332. Surveys have resulted in 1 to 135 moose observed in HD 331 and 2 to 92 in HD 332 since 1983, though many years with low counts are not valid data for trend because of poor survey conditions. In 2009, there were six moose on the WMA out of a total of 35 moose in HD 331. Environmental conditions for the survey preclude that data from being used as valid trend data.

There is a population of antelope in HD 321 that encompasses the WMA, the largest district in the region. A segment of this population uses the WMA yearlong but most significantly as winter range. The population in HD 321 has ranged from 702-7428 between 1972 and 2008 based on total counts or estimates. In the last ten years, it has ranged from about 1300-3000, also based on total counts or estimates with the highest estimate being in 2008. The latest survey, which included the WMA (2007), resulted in approximately 150 pronghorn observed on the WMA out of 1596 total. There may have been more or less on the WMA given a different day for the survey. The estimated number of pronghorn in this HD for 2009 is 3213 animals. Of this number, a few hundred were probably on the WMA.

Bighorn sheep were reintroduced to the Greenhorn Mountains north of the WMA in 2003 and 2004. Prior to last winter, sheep were only observed on or near the WMA two times by FWP personnel. During aerial elk surveys this past winter, there were 10 sheep in the Snowslide Creek area in the Ledford Creek drainage. This spring there were again eight sheep in the same area at a lower elevation. Since that time, FWP personnel in the area have observed no sheep. Beginning this fall, an evaluation of the status of this sheep transplanting effort and subsequent direction will be formally initiated. Please refer to Section I, item 9. Other Livestock Activities within the WMA (pp 10-11), for a complete process and time frame for evaluating the Greenhorn's bighorn sheep reintroduction, MOU, and domestic sheep trailing issue.

Grizzly bears, black bears, mountain lions, and wolves frequent the area. Wolves have denned on or near the area in the past. We have had no confirmed livestock losses by bears, wolves, or lions on the WMA. However, we have had these from the surrounding private and public lands. One wolf pack was eventually removed from the area this last fall, but only after incremental removals of individuals failed to stop the depredation. Livestock depredation on this landscape is to be expected in this day and age. Because of the large home range sizes and abilities, and propensities for these large predators to move long distances, whether there are livestock on the WMA or not will not greatly increase or decrease depredation losses. Grizzly bears have recently been placed back on the threatened list and will receive additional protection consideration.

Blue grouse, sage grouse, occasional ruffed grouse, and Hungarian partridge occur on the WMA as well as a variety of small mammals, but no population estimates have been made for those species. Sage grouse winter on the WMA, and it is likely there are leks in the area though they have yet to be identified. More intense work will be started this spring to try to locate leks. Some waterfowl nesting occurs along the numerous beaver dams located along Robb and Ledford Creeks. The principal waterfowl use is by mallards and teal. Nesting success and brood rearing sites for waterfowl appear to have been improved by the rest rotation grazing system that has been implemented on the WMA.

To address some of the uncertainties of nongame use of Montana Fish, Wildlife and Parks' (FWP) Wildlife Management Areas (WMA) and in an effort to be more comprehensive in our management of wildlife species including nongame as well as game species, FWP intends to conduct rigorous monitoring and develop a statistically sound sampling plan for Robb-Ledford and Blacktail WMA's. The evaluation of the area, commencing summer 2009 with a pilot study and continuing through 2012, will focus on small mammals, songbirds, raptors, and amphibian and aquatic reptile surveys. The sampling design for the surveys has been developed through collaboration between the native species biologist for Region 3, the statewide biometrician, and the nongame data manager and involves stratifying the WMA's by habitat (primary strata) which will be further embedded within the grazing treatment (secondary strata; early season grazed, late season grazed, and rested). This will be conducted to reach two main objectives: (1) to more comprehensively document species occupancy of these WMA's at the landscape level, and (2) evaluate species occupancy and diversity between habitats and between grazing treatments throughout a grazing cycle (3 years). All surveys and monitoring will follow the same sampling protocol that has been developed and intensively employed by Montana Natural Heritage Biodiversity Monitoring Program. After a pilot year during summer 2009, additional efforts will be made to conduct surveys for long-billed curlew, sage grouse, waterfowl, and furbearers (beavers). More intensive sampling is also intended for Robb Creek and Ledford Creek to assess the value of these riparian areas for wildlife. This work will help the agency determine if and how the landscape level grazing practice influences nongame and some fur species of wildlife. All information on species distribution and occurrence will be sent to the Montana Natural Heritage Program to be integrated into their statewide biodiversity-monitoring database.

Alternative A: The grazing system would run from June 22 to October 15, with a maximum of 2955 AUMs. Livestock grazing will impact vegetation across the WMA relative to food and cover for a variety of game and nongame species. The impact will result in the reduction of vegetative cover in portions of the WMA, particularly in the lower elevations along riparian areas of grazed pastures. Under the existing grazing system and livestock stocking level, significant residual forage in rest pastures and on secondary range (i.e. steeper terrain) in grazed pastures has provided standing crops of lightly or unutilized grass providing good cover and wildlife forage throughout much of the WMA.

Impacts to available forage will be reduced in the proposed grazing agreement and the continuation of the R/L System by: 1) one-third of the WMA being totally rested the entire grazing season; 2) one-third of the WMA will not be grazed until after seed ripe in mid-August at a time when most bird nesting (including sage grouse) would be completed; and 3) the cattle stocking density will average no greater than 6 acres/AUM compared to around 3.5 acres per AUM allowed on many public land leases. In addition, substantially more vegetation will be left in the low elevation, early use pastures (which are also the most size limited) because grazing will be limited to no more than 2 weeks as compared to the 5 to 8 weeks of use under the current grazing practice.

Livestock grazing has had some positive benefits for elk in other areas. In the Elkhorn Mountains (Hunting District 380), Grover and Thompson (1986) found that elk selected feeding sites that were grazed by cattle the previous growing season. The removal of older forage by livestock may help establish a higher quality of feed for elk the following spring (Frisina 1992).

Grazing by domestic livestock has been shown to improve accessibility, palatability, and nutritive quality of forage plants preferred by wild herbivores (Jourdonnais and Bedunah 1990). It should be noted that any increased elk use on the WMA grazed lands may be more tied to the reduction in older standing residual forage than to increased nutritive value since the nutritive value of grass is greatly diminished during the winter months when elk are normally on the WMA.

The distribution of grazed and ungrazed pastures has created a mosaic of habitats that have accommodated a wider variety of species with different habitat requirements. Resident wildlife species as well as transient animals have benefited from the increased food and cover that has occurred from the efforts of the 2000 grazing agreement and the implementation of the coordinated grazing management system as compared to the health of the habitat under previous ownership. It is expected that these benefits will be enhanced if the proposed grazing lease were approved because grazing intensity in low elevation pastures will be significantly reduced from 2-3 acres/AUM to 6 acres/AUM.

As a component of the proposed grazing lease, FWP would install a water gap fence along a 2.5-mile portion of Robb Creek near the WMA's headquarters. As with other fences along riparian areas within the WMA, this fence's design will be a 4-strand barbed wire with the highest strand between 38"- 40" to allow for wildlife to move across it and the lowest wire at a height of 16"- 18" above the ground to accommodate smaller wildlife moving underneath it. There will be three water gaps along the fence's length to provide easy access water for all wildlife as well as cattle. *In addition, this fence will also have a let-down design that will be used when livestock are not present.*

Under this Alternative, the presence of cattle on the WMA's landscape will likely not impair or disturb general wildlife movements. The continuation of the R/L System will limit impacts to forage and cover for wildlife and continue to maintain and enhance quality/palatability for ungulates and nongame species. In addition, the three-year term of the lease will allow FWP adaptability, if needed, after evaluation of how well it met WMA objectives following a full three-year rotation.

Alternative B (Shorter Grazing Period): A later placement of cattle onto the lower grazing pasture would likely benefit ground nesting birds because they would not be disturbed by cattle movements. A July 1 start day would mean that most ground nesting birds would be almost through with their nesting season. In addition, cattle will leave the WMA one week earlier than under Alternative A, again leaving more residual cover and forage for wildlife.

Residual forage may be higher under this alternative which would benefit game and nongame species through the fall and winter months that might contribute to healthier individuals.

As with Alternative A, the water gap fence would be installed along Robb Creek to protect riparian resources. As previously described, the design of the fence is not expected to be an insurmountable barrier to local wildlife since there are already other fences defining other pasture areas within the WMA that have been navigated by wildlife.

Under this Alternative, the presence of cattle on the WMA's landscape will likely not impair or disturb general wildlife movements. The continuation of the R/L System will limit impacts to forage and cover for wildlife and continue to maintain and enhance quality/palatability for ungulates and non-game species. In addition, the three-year term of the lease will allow FWP adaptability, if needed, after evaluation of how well it met WMA objectives following a full three-year rotation.

Alternative C (Decrease Number of Cattle): If the grazing lease limited the number of cattle to 500 animals, there will be an increased level of forage and cover available for all wildlife since competition for those resources will have been reduced by about half.

As with Alternatives A and B, the water gap fence would be installed along Robb Creek to protect riparian resources.

Under this Alternative, the presence of cattle on the WMA's landscape will likely not impair or disturb general wildlife movements. The continuation of the R/L System will limit impacts to forage and cover for wildlife and continue to maintain and enhance quality/palatability for ungulates and nongame species. In addition, the three-year term of the lease will allow FWP adaptability, if needed, after evaluation of how well it met WMA objectives following a full three-year rotation.

However if this Alternative is not compatible with the Association's interest, the Association would likely remove their McGuire DNRC lease from the R/L System and FWP may consider other options. None of the values that are derived from the collaborative R/L System would be met on the McGuire property.

Alternative D (Shortest Grazing Season, No Riparian Fence): Similar to Alternatives A, B, and C in terms of increased cover and forage for wildlife in the high elevation pastures, but would substantially exceed those same values in the low elevation pastures due to the short duration of livestock grazing there. There would be no riparian zone fence, so there would be no real or perceived inhibition to wildlife movements.

Under this Alternative, the presence of cattle on the WMA's landscape will likely not impair or disturb general wildlife movements. The continuation of the R/L System will limit impacts to forage and cover for wildlife and continue to maintain and enhance quality/palatability for ungulates and nongame species. In addition, the three-year term of the lease will allow FWP adaptability, if needed, after evaluation of how well it met WMA objectives following a full three-year rotation.

However, if this Alternative is not compatible with the Association's interest, the Association would likely remove their McGuire DNRC lease from the R/L System and FWP may consider other options. None of the values that are derived from the collaborative R/L System would be met on the McGuire property.

Alternative E (No Action): Larger amounts of winter forage will exist on deeded and DNRC leased lands controlled by FWP since cattle would no longer be consuming a portion of the

vegetation each year. By not grazing livestock, any benefits from removing old forage to improve the quality/palatability of grass for ungulates and nongame species would not exist on deeded FWP land. Any impacts caused by cattle movements through nesting or burrow sites will be eliminated.

Since the DNRC McGuire property would not be a part of a cooperative grazing regime, residual forage levels for ungulates would likely be substantially reduced because of continual grazing by cattle. It is unknown what management direction the BLM might take in this situation since grazing on their lands has been tied to the Robb/Ledford WMA land base and livestock use.

4. Soil Resources

Some rock outcrops exist, but soil is generally free of gravel to depths of 6-12 inches. Over the past 50 years, the soils of the WMA have been exposed to disturbances from cattle movements, as well as resident and transient wildlife. No significant changes to existing soils conditions are anticipated if one of the proposed action alternatives were implemented. Disturbances to unique geological features will not be necessary for the installation of the water gap fence.

III. EVALUATION OF IMPACTS ON THE HUMAN ENVIRONMENT

1. Access and Recreation

The WMA is located in deer and elk Hunting District 324. Recreation hunting pressure is high with approximately 1764 elk hunters recreating for 11,082 days in 2008 in this HD. Mule and white-tailed deer populations provided hunting recreation in HD 324 for approximately 507 hunters for 3,372 days in 2008. Some limited moose hunting opportunities exist on the WMA because it serves primarily as winter range. However, abundant opportunity exists on surrounding Forest Service lands where wintering moose from the WMA spend the spring, summer, and fall. There is also antelope hunting recreation provided on the WMA, and for the district as a whole recreation was provided for approximately 201 hunters and 448 hunter days in 2008.

Fishing opportunities for various species of trout and sculpin exist in many of the creeks within the WMA and the properties associated with the R/L System. Specific species locations were previously identified in Section II, Fisheries and Water Resources. Angling pressure is limited to mainly residents because of their remote locations.

Opportunities for camping, hiking, and other forms of non-consumptive recreation are boundless.

Alternative A: The grazing system would run from June 22 to October 15, with a maximum of 2955 AUMs. The presence of cattle will not significantly restrict recreational use of the WMA. Some individuals may find livestock along their fishing stream or in other areas offensive, but this is not expected to be a significant problem to the majority of the public that use the WMA. Livestock will only occupy approximately one-sixth of the WMA that is a part of the R/L System at any give time during the grazing season. Livestock will be removed by October 15 each year prior to the initiation of the majority of the big game hunting that occurs on the WMA. Hunters are allowed full access and use of the WMA, even in pastures that may be

occupied by cattle. The removal date for cattle will overlap with the opening week(s) of the antelope season but not with the general big game season. Prior to this change and since FWP initiated rest rotation grazing on the WMA in 1991, there has been no conflict with the general big game season, and only a few days overlap with the opening of the antelope season. The potential exists for this degree of overlap to be perceived as problematic by hunters.

Non-consumptive recreation would be impacted aesthetically if individuals recreated in use pastures. However, livestock is a part of the Montana landscape and users have varying tolerances for livestock presence. No significant changes to recreational opportunities are anticipated if this alternative was implemented.

Alternative B (Shorter Grazing Period) and Alternative C (Decrease Number of Cattle):

Under either of these alternatives, there would be no changes to access and recreational opportunities within the publicly owned lands just as described for Alternative A. There would be little overlap with antelope seasons and none with the general big game season under Alternative B. Non-consumptive recreation would be impacted the same as under Alternative A.

Alternative D (Shortest Grazing Season, No Riparian Fence): Similar to Alternatives A, B, and C in terms of overall access and recreation. This alternative is the same as B with regard to the least amount of overlap with hunting seasons.

Alternative E (No Action): Same as Alternative A with regard to recreational access. Cattle would not be present on the WMA to offend some segments of the public who do not like to recreate on public land in the presence of livestock. There would be no grazing, and grazing impacts to vegetation along fishing streams that might have been viewed negatively by some individuals will begin to recover over time. There would be no cattle present during the upland bird and big game seasons. Most non-consumptive users would feel no negative impact.

2. Community Impacts and Land Use

Alternative A: The grazing system would run from June 22 to October 15, with a maximum of 2955 AUMs. Locally owned ranches represented in the Ledford Creek Grazing Association (Association) will be allowed to utilize portions of the WMA for summer livestock grazing. Summer pasture is in short supply, and is important for the economic viability of ranches that do not have adequate summer grazing on their own land to support their operations. This alternative will result in a reduction of one week of grazing and a reduction in the total number of AUMs (from 3235 to 2955) that are allowed to be grazed on the WMA.

Alternative B (Shorter Grazing Period): There would be a reduction of 279 AUMs compared to Alternative A. Other than that, there are no additional changes to the local community or the existing use of the land than what was noted for Alternative A from a shorter grazing period. The only change to the proposed grazing lease would be that cattle would be placed on the pastures one week later than under the terms of the Alternative A. The proposed water gap fence would still be installed along Robb Creek to protect the riparian corridor. The Association would be left to find an additional week of June pasture prior to entering the R/L System as compared to Alternative A.

Alternative C (Decrease Number of Cattle): Similar to Alternative A, the use of the grazing system's lands would continue to be grazed maintaining some level of agricultural use that has been occurring over the past five decades. FWP would limit the number of cattle accessing the grazing system to 500 animals. Under this alternative, there would be a reduction of 428AUMs and 149 AUMs compared to Alternatives A and B, respectively. The Association's members would still be able to make full use of public summer pastures (FS and BLM allotments) but use of the R/L system pastures for only a portion of their collective herd. It is unknown if the remaining amount of the Association's cattle would be placed on another public-grazing property or kept on private property if this adjustment to the lease terms were approved. It is also unknown if this Alternative is compatible with Association interests. If not, the impacts on the McGuire property and the Association's operations would be similar to those described in Alternative E below. However, if this Alternative is not compatible with the Associations interest, the Association would likely remove their McGuire DNRC lease from the R/L System and FWP may consider other options. None of the collective values that are derived from the collaborative R/L System would be met on the McGuire property.

Alternative D (Shortest Grazing Season, No Riparian Fence): Under this alternative, there would be a reduction of 838 AUMs, 410 AUMs, and 559 AUMs compared to alternatives A, B, and C, respectively. The Association members would still be able to make full use of their FS and BLM allotments. However, the Association would have tough decisions to make concerning the gaps in use allowed between the public land (FS and BLM) allotments and use of the R/L system pastures. It is also unknown if this Alternative is compatible with Association interests. If not, the impacts on the McGuire property and the Association's operations would be similar to those described in Alternative E below. However, if this Alternative is not compatible with the Associations interest, the Association would likely remove their McGuire DNRC lease from the R/L System and FWP may consider other options. None of the collective values that are derived from the collaborative R/L System would be met on the McGuire property.

Alternative E (No Action): No grazing would be allowed on the WMA lands controlled by the FWP. FWP would continue to manage the WMA for the benefit of its natural resources (wildlife, fisheries, and vegetation) while providing the public access for hunting, fishing, and hiking activities.

Association members would have to locate additional summer grazing lands for their livestock if the level of forage within the McGuire property is insufficient. It is unknown if the Association would be able to utilize the BLM lands for grazing since the BLM property is tied to the base property of the WMA. These issues could possibly create additional expenses for Association members if they needed to move their livestock great distances to other summer pastures within the area other than using all of the properties included within the R/L cooperative grazing management system.

3. Cultural and Historic Resources

Livestock grazing has been a practice on southwest Montana rangelands since the latter half of the 1800's including the properties incorporated in the coordinated grazing management system.

If Alternatives A, B, C, or D were implemented, the grazing of cattle on the WMA is not expected to disturb cultural or historic resources. Previous fencing and water system improvements that were installed as part of the 2000 grazing lease did not uncover previously unknown sensitive sites. If cultural or historic resources are discovered during the installation of the proposed water gap fence under Alternatives A, B, and C, FWP will contact the State Historic Preservation Office (SHPO) for guidance and assistance.

If Alternative E were chosen, FWP would continue to watch for previously undiscovered resources and consult with SHPO if some were located.

4. Risk/Health Hazards

All four of the livestock alternatives will increase tall larkspur poisoning risk to cattle over movement practices that occurred under the current lease. This assessment is primarily based on the hard calendar dates for movement in all four livestock alternatives. Due to the broad distribution of tall larkspur throughout the higher elevation pastures and the limited capacities in the lower elevation pastures, this risk will need to be addressed by the livestock owners through their use of silent herder or some other livestock supplement in order to reduce their risk of cattle loss. None of the alternatives are expected to result in increased risk or health hazards to humans or wildlife. Noxious weed control within the WMA will involve the use of chemicals, and these chemicals will be applied in recommended amounts that should have minimal impacts on non-target vegetation under all alternatives.

5. Public Services

Alternative A: The grazing system would run from June 22 to October 15, with a maximum of 2955 AUMs. This alternative will result in the commitment of FWP funds for the water gap fence and continuing management oversight to maintain the R/L System. Some ongoing maintenance of the fence is expected because of the use of the area by cattle, by cattle and bison on adjacent privately controlled land, and by wildlife. Any maintenance expenses will be covered by the existing operations and maintenance budget for the WMA.

If the proposed grazing lease were approved, public interest in the agreement is anticipated because of previous public feedback FWP received from the 2000 grazing lease and its associated fencing and water system improvements.

Alternative B (Shorter Grazing Period): Expected consequences to FWP are the same as those described for Alternative A.

Alternative C (Decrease Number of Cattle):

Expected consequences to FWP are the same as those described for Alternative A. However if under Alternative C the Association finds it not compatible with their interests, impacts will be similar as those described under Alternative E with regard to the McGuire property. In addition if this Alternative is not compatible with the Association's interest, the Association would likely remove their McGuire DNRC lease from the R/L System and FWP may consider other options.

None of the values that are derived from the collaborative R/L System would be met on the McGuire property.

Alternative D (Shortest Grazing Season, No Riparian Fence): Under this alternative, expected commitments to FWP are the same as those described for Alternatives A, B, and C, with the exception that there will be no riparian fence needed along Robb Creek. However if under Alternative C the Association finds it not compatible with their interests, impacts will be similar as those described under Alternative E with regard to the McGuire property. In addition if this Alternative is not compatible with the Association's interest, the Association would likely remove their McGuire DNRC lease from the R/L System and FWP may consider other options. None of the values that are derived from the collaborative R/L System would be met on the McGuire property.

Alternative E (No Action): This alternative will not have the new construction costs related to the water gap fence along Robb Creek, but this alternative would require FWP to install a fence along the McGuire property border to keep the Association's cattle from grazing on the WMA. This boundary fence could cost as much as \$120,000 for its 12-mile length. Additionally, there is no boundary fence separating BLM and WMA lands in the Taylor Creek Drainage. Assuming BLM continues to graze this area, FWP would likely need to install 5.25 miles of additional boundary fence. This cost would be approximately \$52,500.

Some maintenance costs associated with the boundary fences would likely impact the WMA's budget, but staff commitments for the oversight of a grazing system could be redirected to other WMA business.

Under this alternative, the previously installed improvements (water system and fencing) within the WMA for the benefit of R/L grazing system would be abandoned, removed, or reconfigured. Since 2000, FWP has invested \$460,893.76 into the livestock watering system from Kelly Springs and removed old fencing and installed new fencing to meet the pasture designations of the R/L System. The water system at Kelley Springs would continue to require some maintenance for and by downstream users even though it might be turned off on the WMA portion of the line. Internal fencing completed for the rest-rotation system at some future date would be removed from within the WMA at an additional expense to FWP.

Impacts to FWP would be most significant under this alternative both in financial and staffing resources.

PART IV. PUBLIC PARTICIPATION

1. Public involvement:

The public will be notified in the following manners to comment on this current EA, the proposed action, and alternatives:

- Two public notices in each of these papers: *Bozeman Chronicle* and *Butte Standard*
- One statewide press release
- Public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov>, and

- Copies of this environmental assessment will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

Three public meetings were scheduled to coincide with the public comment period. They were held in Butte, Bozeman, and Sheridan. Information identifying the specific dates, times, and venues of those meetings were advertised within local papers and posted on the FWP website as they become available and were as follows: October 13, Butte; October 14, Sheridan; and October 15, Bozeman.

2. Duration of comment period:

The public comment period was initially set for (45) forty-five days (through October 5), but was extended through October 23. Written comments were accepted until 5:00 p.m., October 23, 2009 and were mailed to the address below:

Robb/Ledford WMA Grazing Lease
Montana Fish, Wildlife & Parks
1400 S. 19th Ave.
Bozeman, MT 59718-5496

Or email comments to: RLGrazing@mt.gov

PART V. EA PREPARATION

- 1. Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)? No**
If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.

Based upon the above assessment, which has identified a very limited number of minor impacts from the proposed action that can be mitigated, an EIS is not required and an environmental assessment is the appropriate level of review.

2. Persons responsible for preparing the EA:

Rebecca Cooper
MEPA Coordinator
Montana Fish, Wildlife & Parks
1420 E 6th Ave.
Helena, MT 59601
406-444-4756

Kurt Alt
Regional Wildlife Manager
Montana Fish, Wildlife & Parks
1400 S. 19th Ave.
Bozeman, MT 59718
406-994-6935

3. List of agencies or offices consulted during preparation of the EA:

Ecological Solutions Group, LLC
Montana Fish, Wildlife & Parks:
Fish and Wildlife Division, Legal Bureau
Montana Natural Heritage Program – Natural Resources Information System (NRIS)
U.S. Department of Agriculture – Natural Resources Conservation Service

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APPENDICES

- A. Robb/Ledford Management Plan
- B. Robb/Ledford Coordinated Grazing System
- C. Proposed 2009- 2010 Grazing Lease and Exchange of Use Agreement
- D. Map of WMA and Location Map of Water Gap Fence
- E. 2006 Robb Creek and Ledford Creek Riparian and Wetland Inventory Assessment Report
- F. RLWMA Vegetation Data Analysis Reports, 2003, 2004 and 2008
- G. Wildlife Survey and Inventory Data
- H. 2000 Robb/Ledford Grazing Lease Environmental Assessment
- I. 2009 Pilot Non-game Wildlife Survey and Inventory Report
- J. Topographic Map Showing Pastures and Fence Locations
- K. Estimated Cost/benefit Analysis Between Alternatives